

ABSTRACT OF THE DISCLOSURE

An intelligent on-board monitoring system for replaceable module for a printing apparatus includes a memory element, an input for receiving information either from sensors on the replaceable module, or from the printing apparatus concerning printing operations performed, and a microprocessor connected to the memory for performing calculations upon data stored in the memory and upon the input information. By expanding this intelligent on-board monitoring system with expanded memory, either on board the replaceable module, or by way of network access, the capability to enable software upgrades is provided. The software upgrades may relate to the performance of the replaceable module or to the machine into which it is installed. These software upgrades may be accomplished without requiring computational resources of the printing apparatus itself and by proper scheduling without impacting customer machine utilization.